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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,094	10/30/2000	Robert B. Friedman	39518/248882	7881

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EXAMINER
GOLD, AVI M

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/702,094	FRIEDMAN ET AL.
	Examiner	**Art Unit**
	Avi Gold	2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _24 June 2004_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-31_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-31_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _3/24/04, 6/24/04_.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

The amendment received on June 24, 2004 has been entered and fully

considered.

Information Disclosure Statement

1.   The information disclosure statement filed March 24, 2004 fails to comply with 37

CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each

publication or that portion which caused it to be listed; and all other information or that

portion which caused it to be listed. It has been placed in the application file, but the

information referred to therein has not been considered. There is no copy available for

foreign patent AU 5456.

Response to Amendment

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

3.   Claims 1,4-7, 9-11, 14-27, and 30-31 are rejected under 35 U.S.C. 102(e) as

being anticipated by Leinwand et al., U.S. Patent No. 6,130,890.

Leinwand teaches the invention as claimed including a method and system for

improving routing decisions, particularly for Internet data packets traveling to a

destination associated with another country (see abstract).

Regarding claim 1, Leinwand teaches a method for routing network traffic,

comprising:

receiving the network traffic (col. 3, lines 9-11, Leinwand discloses a packet

traveling over a system from source to destination);

determining a destination for the network traffic (col. 3, lines 11-13, Leinwand

discloses a destination in a geographic area);

obtaining geographic information on one of a source or the destination

associated with the network traffic from a map of the network, the map being produced

as a result of:

determining a route through the network which includes one of the destination or

source (col. 3, lines 9-11);

deriving a geographic location of any intermediate hosts contained within the

route through the network (col. 2, lines 14-19, Leinwand discloses autonomous systems

acting as intermediate nodes to route a packet to its destination; col. 3, lines 33-44,

Leinwand discloses autonomous systems having a geographic locations);

analyzing the route and the geographic locations of any intermediate hosts (col. 7, lines 5-25, Leinwand discloses routers making a decision as to which of the autonomous systems the data packet is going to next);

determining the geographic location of the source or destination (col. 3, lines 11-13, Leinwand discloses separate geographic location for source and destination); and

storing the geographic location in the map (col. 15, lines 19-34, Leinwand discloses an autonomous system being mapped according to its geographic location); and

directing the network traffic to a desired destination based on the geographic location of the source or destination (col. 3, lines 9-34, Leinwand discloses a packet being routed to its destination based on its source or destination location).

Regarding claim 4, Leinwand teaches the method as set forth in claim 1, wherein receiving the network traffic comprises receiving a request at a host server (col. 2, lines 14-20, Leinwand discloses autonomous systems requesting traffic).

Regarding claim 5, Leinwand teaches the method as set forth in claim 1, wherein the network traffic comprises a request, the desired destination comprises a desired server, and wherein directing the network traffic comprises directing the request to the desired server based on the geographic location (col. 1, lines 39-50, Leinwand discloses a destination being linked to a geographic region and the traffic being directed to it based on it location).

Regarding claim 6, Leinwand teaches the method as set forth in claim 1, wherein directing the network traffic to the desired destination comprises selecting a route with a shortest distance to the desired destination (col. 7, lines 46-52, Leinwand discloses choosing the route having the shortest length).

Regarding claim 7, Leinwand teaches the method as set forth in claim 1, wherein directing the network traffic to the desired destination comprises selecting a route to the desired destination having the shortest latency time (col. 9, lines 22-39, Leinwand discloses choosing a route to avoid delays in transmission).

Regarding claim 9, Leinwand teaches the method as set forth in claim 1, wherein directing the network traffic to the desired destination comprises selecting the desired destination based on its load (col. 11, lines 5-24, Leinwand discloses choosing a route to avoid congestion).

Regarding claim 10, Leinwand teaches the method as set forth in claim 1, wherein the geographic location comprises the geographic location of the source and directing the network traffic to the desired destination comprises selecting the desired destination because it has content associated with the geographic location (col. 11, lines 39-50, Leinwand discloses a phone call being routed to a geographic region in which the physical destination of the call is located).

Regarding claim 11, Leinwand teaches the method as set forth in claim 1, wherein directing the network traffic to the desired destination comprises selecting the desired destination based on a connection speed associated with the source (col. 11, lines 5-24, Leinwand discloses choosing a route having the fastest speed for the data packet).

Regarding claim 14, Leinwand teaches the method as set forth in claim 1, wherein directing the network traffic comprises selecting a route based on interconnection speeds within the network (col. 11, lines 5-24, Leinwand discloses choosing a route having the fastest speed between nodes for the data packet).

Regarding claim 15, Leinwand teaches the method as set forth in claim 1, further comprising analyzing the network (col. 7, lines 5-25, Leinwand discloses a router making a decision as to which route to take).

Regarding claim 16, Leinwand teaches the method as set forth in claim 15, wherein analyzing comprises analyzing interconnections between nodes in the network (col. 7, lines 5-25, Leinwand discloses each interconnected router making a decision which route to go to the destination).

Regarding claim 17, Leinwand teaches the method as set forth in claim 15, wherein analyzing comprises analyzing nodes within the network (col. 7, lines 5-25, Leinwand discloses each router making a decision once it receives the data).

Regarding claim 18, Leinwand teaches the method as set forth in claim 15, wherein analyzing comprises modeling behavior of the network (col. 7, lines 5-25, Leinwand discloses routers choosing routes for the packets).

Regarding claim 19, Leinwand teaches the method as set forth in claim 18, wherein modeling comprises approximating the behavior at nodes (col. 7, lines 5-23, Leinwand discloses autonomous systems receiving reachability information in order to determine the routes).

Regarding claim 20, Leinwand teaches the method as set forth in claim 18, wherein modeling comprises simplifying the map of the network by combining nodes in traffic routes (col. 1, lines 39-50, Leinwand discloses calls routed to a geographic region; col. 2, lines 21-32, Leinwand discloses router acting as a node for data to access multiple routes).

Regarding claim 21, Leinwand teaches the method as set forth in claim 1, wherein obtaining the geographic information comprises generating the map of the network (col. 15, lines 19-34).

Regarding claim 22, Leinwand teaches the method as set forth in claim 1,

wherein obtaining the geographic information comprises querying a system for the

geographic information and receiving a response from the system with the geographic

information (col. 3, lines 9-44, Leinwand discloses obtaining information relating to an

autonomous system which includes its geographic information).

Regarding claim 23, Leinwand teaches the method as set forth in claim 1,

wherein the network comprises the Internet and the network traffic comprises packets

(col. 4, lines 36-38, Leinwand discloses network traffic comprised of packets routed over

the Internet).

Claims 24-27 and 30-31 do not teach or define any new limitations above claims

1, 7, 9, and 11 and therefore are rejected for similar reasons.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Leinwand further in view of Zhang et al., U.S. Patent No. 6,324,585.

Leinwand teaches the invention substantially as claimed including a method and

system for improving routing decisions, particularly for Internet data packets traveling to

a destination associated with another country (see abstract).

As to claims 2 and 3, Leinwand teaches the method of claim 1.

Leinwand fails to teach the limitation further including the use of a domain name

service inquiry.

However, Zhang teaches a method and apparatus for resolving a Domain Name

Service request in a system where it is possible for the user to connect to more than

one network at a time (see abstract). Zhang teaches the use of domain name service

(col. 1, lines 34-42).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Leinwand in view of Zhang to use a domain name service inquiry.

One would be motivated to do so because a domain name service enables the central

managing of host names to IP addresses.

6.   Claims 8, 12, 13, 28, and 29 rejected under 35 U.S.C. 103(a) as being

unpatentable over Leinwand further in view of Buhrke et al., U.S. Patent No. 5,231,631.

Leinwand teaches the invention substantially as claimed including a method and

system for improving routing decisions, particularly for Internet data packets traveling to

a destination associated with another country (see abstract).

As to claims 8, 12, 13, 28, and 29, Leinwand teaches the method of claims 1 and

24.

Leinwand fails to teach the limitation further including the selection of a route

based on bandwidth.

However, Buhrke teaches a method and apparatus for controlling overflow traffic

in a data network (see abstract). Buhrke teaches the use of selecting a route based on

having the most available bandwidth, selecting the amount of bandwidth available at the

destination, and selecting the destination based on the amount of bandwidth available

at it (col. 1, lines 65-67; col. 2, lines 1-66).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Leinwand in view of Buhrke to select a route of traffic based on

bandwidth. One would be motivated to do so because decisions based on bandwidth

help avoid congestion in data traffic.

Claims 28 and 29 do not teach or define any new limitations above claims 8 and

13 and therefore are rejected for similar reasons.

Response to Arguments

7.   Applicant's arguments filed June 24, 2004 have been fully considered but they

are not persuasive.

The rejection of claims under 35 USC 102 stand;

Regarding claim 1, Leinwand does teach how geographic information is produced in cited column and line numbers and in addition Leinwand discloses different ways of determining geographic location (col. 10, lines 1-11). Leinwand also teaches analyzing the route with regards to geography in cited column and line numbers and in addition Leinwand inherently shows routing involving geography in column 2, lines 14-19 and column 3, lines 33-44. The rejection on the limitation involving storing the geographic location in the map stands because it reads on the limitation of the claim.

Regarding claim 4, Leinwand discloses the autonomous system associated with a geographic area (col. 3, lines 40-44).

Regarding claims 11 and 14, the rejection reads on the wording of the claims; said connection speed is associated with the source.

Regarding claim 15, the rejection reads on the claim; said router does analyze the network.

Regarding claims 17 and 19, the rejection reads on the wording of the claims.

Regarding rejections under 35 USC 103: In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

9.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

U.S. Pat. No. 6,272,150 to Hrastar et al.

U.S. Pat. No. 6,266,607 to Meis et al.

U.S. Pat. No. 6,151,631 to Ansell et al.

U.S. Pat. No. 6,285,748 to Lewis.

U.S. Pat. No. 6,347,078 to Narvaez-Guarnieri et al.

U.S. Pat. No. 5,774,668 to Choquier et al.

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Avi Gold whose telephone number is 703-305-8762.
The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Ario Etienne can be reached on 703-308-7562. The fax phone number for
the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
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you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

Avi Gold

Patent Examiner

Art Unit 2157

AMG

SALEH NAJJAR
PRIMARY EXAMINER